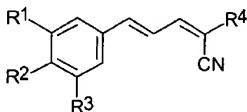


In the claims:

1. **(Currently Amended)** A pharmaceutical composition suitable for oral, intravenous, intraperitoneal, subcutaneous, intramuscular, nasal, intrapulmonary, intrathecal, or rectal administration, comprising a pharmaceutically acceptable diluent or carrier and a compound of Formula I, or a and salts, solvates or hydrates thereof:



wherein

R¹ and R² are each independently selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, CF₃, OCF₃ and halo;

R³ is selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, halo and CH₂-S-(CH₂)_n Ar;

R⁴ is selected from the group consisting of C(X)R⁵, SO₃Ar, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), P(O)(OH)₂, P(O)(OC₁₋₆alkyl)₂, and C(NH₂)=C(CN)₂;

X is selected from O, S, NH and N-C₁₋₆alkyl;

R⁵ is selected from the group consisting of NH₂, OH, NH(CH₂)_pAr, NH(CH₂)_pOH, (CH₂)_pOC₁₋₆alkyl, C₁₋₆alkyl, C₁₋₆alkoxy, NHNH₂, NHC(O)NH₂, NHC(O)C₁₋₆alkoxy, N-morpholino and N-pyrrolidino; and

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo;

n is 0 to 4; and

p is 1-4.

2. **(Currently Amended)** The composition ~~compound~~ according to claim 1, wherein R¹ and R² are each independently selected from the group consisting of H, OH, C₁₋₄alkyl, C₁₋₄alkoxy, NH₂, NH-C₁₋₄alkyl, SH, S-C₁₋₄alkyl, O-Si(C₁₋₄alkyl)(C₁₋₄alkyl)(C₁₋₄alkyl), NO₂, CF₃, OCF₃ and halo.

3. **(Currently Amended)** The composition ~~compound~~ according to claim 2, wherein R¹ and R² are each independently selected from the group consisting H, OH, OCH₃, O-Si(CH₃)₂(tBu), S-Me, SH and NO₂.

4. **(Currently Amended)** The composition ~~compound~~ according to claim 3, wherein R¹ and R² are both OH or R¹ and R² are both OCH₃.

5. **(Currently Amended)** The composition ~~compound~~ according to claim 4, wherein R¹ is OCH₃ and R² is OH.

6. **(Currently Amended)** The composition ~~compound~~ according to claim 1, wherein R³ is selected from the group consisting of H, OH, C₁₋₄alkyl, C₁₋₄alkoxy, NH₂, NH-C₁₋₄alkyl, N(C₁₋₄alkyl)(C₁₋₄alkyl), SH, S-C₁₋₄alkyl, NO₂ and halo.

7. **(Currently Amended)** The composition ~~compound~~ according to claim 6, wherein R³ is selected from the group consisting of H, OH, OCH₃, SH, SMe, NO₂ and halo.

8. **(Currently Amended)** The composition ~~compound~~ according to claim 7, wherein R³ is selected from the group consisting of H, OH and OCH₃.

9. **(Currently Amended)** The composition ~~compound~~ according to claim 1, wherein R⁴ is selected from the group consisting of C(X)R⁵ and C(NH₂)=C(CN)₂.

10. **(Currently Amended)** The composition ~~compound~~ according to claim 9, wherein R⁴ is C(X)R⁵.

11. **(Currently Amended)** The composition compound according to claim 10, wherein X is selected from the group consisting of O and S.

12. **(Currently Amended)** The composition compound according to claim 10, wherein R⁵ is selected from the group consisting of NH₂, OH, NH(CH₂)_pAr, NH(CH₂)_pOH and C₁₋₄alkoxy.

13. **(Currently Amended)** The composition compound according to claim 12, wherein p is 1-3.

14. **(Currently Amended)** The composition compound according to claim 13, wherein R⁵ is selected from the group consisting of NH₂, OH, NH(CH₂)_pAr, NH(CH₂)_pOH and OCH₃.

15. **(Currently Amended)** The composition compound according to claim 14, wherein p is 1-2.

16. **(Currently Amended)** The composition compound according to claim 1, wherein Ar is an unsubstituted phenyl group or a phenyl group substituted with 1-4 substituents optionally selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo.

17. **(Currently Amended)** The composition compound according to claim 14, wherein Ar is an unsubstituted phenyl group or a phenyl group substituted with 1-2 substituents optionally selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo.

18. **(Currently Amended)** The composition compound according to any of claims 16 and 17, wherein Ar is an unsubstituted phenyl group or phenyl group substituted with 1-2 substituents optionally selected from the group consisting of OH, C₁₋₄alkyl, C₁₋₄alkoxy, NH₂, NH-C₁₋₄alkyl, N(C₁₋₄alkyl)(C₁₋₄alkyl), SH, S-C₁₋₄alkyl, NO₂, CF₃, OCF₃ and halo.

19. **(Currently Amended)** The composition compound according to claim 18, wherein Ar is an unsubstituted phenyl group or phenyl group substituted with 1-2 substituents optionally selected from the group consisting of OH, OCH₃, NH₂, NHCH₃, N(CH₃)₂, SH, SCH₃, CF₃, OCF₃ and halo.

20. **(Currently Amended)** The composition compound according to claim 19, wherein Ar is selected from the group consisting of phenyl and 3,4-dihydroxyphenyl.

21. **(Currently Amended)** The composition compound according to claim 1, wherein the compound is selected from the group consisting of:

(E,E)-2-(benzylamido)-3-styrylacrylonitrile (CR1);

(E,E)-2-(benzylamido)-3-(3,4-dimethoxystyryl)acrylonitrile (CR2);

(E,E)-2-(benzylamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR3);

(E,E)-2-(benzylamido)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4);

(E,E)-2-(phenylethylamido)-3-(3,4-dimethoxystyryl)acrylonitrile (CR5);

(E,E)-2-(phenylethylaminocarbonylde)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR8);

(E,E)-2-(phenylpropylamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR9);

(E,E)-2-(3,4-dihydroxybenzylamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11);

(E,E)-2-thioacetamido-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR12);

(E,E)-2-acetamido-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR13);

(E,E)-2-carboxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR14);

(E,E)-2-carbomethoxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR15);

(E,E)-2-aminocarbonylaetamide-3-[3,4-bis(t-

butyldimethylsilyloxy)styryl)]acrylonitrile(CR16);

(E,E)-2-acetamido-3-(3,4-dihydroxystyryl)acrylonitrile (CR17);

(E,E)-2-(benzylaminocarbonylde)-3-[3,4-bis(t-

butyldimethylsilyloxy)styryl)]acrylonitrile (CR18);

(E,E)-2-(3,4-dihydroxybenzylamido)-3-styrylacrylonitrile (CR19);

(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonylde)-3-[3,4-bis(t-butyldimethylsilyloxy)styryl]acrylonitrile (CR20);
(*E,E*)-2-(3,4-dihydroxybenzylamido)-3-(3,4-dihydroxystyryl)acrylonitrile (CR21);
(*E,E*)-2-(β -ethanolamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR24);
(*E,E*)-2-(benzylaminocarbonylde)-3-(4-nitrostyryl)acrylonitrile (CR27);
(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonylde)-3-(4-nitrostyryl)acrylonitrile(CR28);
and
(*Z,E,E*)-2-(1-amino-2,2-dicyanoethenyl)-3-(4-nitrostyryl)acrylonitrile (CR29).

22. (**Currently Amended**) The composition ~~compound~~ according to claim 21, selected from the group consisting of:
(*E,E*)-2-(benzylaminocarbonylde)-3-styrylacrylonitrile (CR1);
(*E,E*)-2-(benzylaminocarbonylde)-3-(3,4-dimethoxystyryl)acrylonitrile (CR2);
(*E,E*)-2-(benzylaminocarbonylde)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR3);
(*E,E*)-2-(benzylamido)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4);
(*E,E*)-2-(phenylethylaminocarbonylde)-3-(3,4-dimethoxystyryl)acrylonitrile (CR5);
(*E,E*)-2-(phenylpropylaminocarbonylde)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR9);
(*E,E*)-2-(3,4-dihydroxybenzylamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11);
(*E,E*)-2-aminothiocarbonylthioacetamide-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR12);
(*E,E*)-2-aminocarbonylaetamide-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR13);
(*E,E*)-2-carboxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR14); and
(*E,E*)-2-carbomethoxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR15);
(*E,E*)-2-acetamido-3-(3,4-dihydroxystyryl)acrylonitrile (CR17);
(*E,E*)-2-(3,4-dihydroxybenzylamido)-3-styrylacrylonitrile (CR19);
(*E,E*)-2-(3,4-dihydroxybenzylamido)-3-(3,4-dihydroxystyryl)acrylonitrile (CR21); and
(*E,E*)-2-(β -ethanolamido)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR24).

23. **(Currently Amended)** The composition compound according to claim 22, selected from the group consisting of:
(E,E)-2-(benzylaminocarbonylde)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4);
(E,E)-2-(3,4-dihydroxybenzylaminocarbonylde)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11);
(E,E)-2-aminocarbonylaetamide-3-(3,4-dihydroxystyryl)acrylonitrile (CR17);
(E,E)-2-(3,4-dihydroxybenzylaminocarbonylde)-3-styrylacrylonitrile (CR19);
(E,E)-2-(3,4-dihydroxybenzylaminocarbonylde)-3-(3,4-dihydroxystyryl)acrylonitrile (CR21); and
(E,E)-2-(β-ethanolaminocarbonylde)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR24).

24. **(Currently Amended)** The compound A pharmaceutical composition comprising a pharmaceutically acceptable diluent or carrier and (E,E)-2-(benzylaminocarbonylde)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4).

25. **(Currently Amended)** The compound A pharmaceutical composition comprising a pharmaceutically acceptable diluent or carrier and (E,E)-2-(3,4-dihydroxybenzylaminocarbonylde)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11).

26. **(Currently Amended)** The compound A pharmaceutical composition comprising a pharmaceutically acceptable diluent or carrier and (E,E)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-styrylacrylonitrile (CR19), (E,E)-2-(3,4-dihydroxybenzylamide)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11).

27. (Cancelled)

28. **(Currently Amended)** A method of modulating cell proliferation comprising administering an effective amount of a compound composition of claim 23 to modulate cell proliferation to a cell or animal in need thereof.

29. **(Currently Amended)** A method of inhibiting cell proliferation comprising administering an effective amount of a compound composition of claim 23 to inhibit cell proliferation to a cell or animal in need thereof.

30. **(Original)** The method of claim 29, wherein the cell proliferation that is inhibited is cancer cell proliferation.

31. **(Currently Amended)** A method of treating cancer comprising administering to an animal in need thereof an effective amount of a composition compound of claim 23.

32. **(Currently Amended)** The method of claim 30 or 31, wherein said cancer is a hematopoietic cell cancer.

33. **(Currently Amended)** The method of claim 30 or 31, wherein said cancer is a leukemia, a lymphoma, a myeloma or a carcinoma.

34. **(Currently Amended)** The method of claim 33, wherein said leukemia is acute lymphoblastic leukemia, Philadelphia+ leukemia, Philadelphia- leukemia, acute myelocytic leukemia, chronic myeloid leukemia, chronic lymphocytic leukemia or juvenile myelomonocyte leukemia.

35. **(Currently Amended)** The method of claim 34, wherein said leukemia is acute lymphoblastic leukemia.

36. **(Currently Amended)** A method of modulating cell proliferation, comprising administering an effective amount of a compound capable of modulating cell proliferation according to claim 1 or a composition of claim 1-27 to a cell or animal in need thereof.

37. **(Currently Amended)** A method of inhibiting cell proliferation, comprising administering an effective amount of a compound capable of inhibiting cell proliferation

~~according to claim 1 or a composition according to claim 1~~ 27 to a cell or animal in need thereof.

38. **(Currently Amended)** A method of inhibiting cancer cell proliferation, comprising administering an effective amount of ~~a compound capable of inhibiting cancer cell proliferation according to any one of claim 1 or a composition according to claim 1~~ 27 to a cell or animal in need thereof.

39. (Cancelled)

40. **(Currently Amended)** A method according to claim 38 ~~or 39~~, wherein said cancer is a hematopoietic cell cancer.

41. **(Currently Amended)** A method according to claim 38 ~~or 39~~, wherein said cancer is a leukemia, a lymphoma, a myeloma or a carcinoma.

42. **(Currently Amended)** A method according to claim 41, wherein said leukemia is acute lymphoblastic leukemia, aggressive Philadelphia+ leukemia, acute myelocytic leukemia, chronic myeloid leukemia, chronic lymphocytic leukemia or juvenile myelomonocyte leukemia,

43. **(Currently Amended)** A method according to claim 42, wherein said leukemia is acute lymphoblastic leukemia.

44. (New) A pharmaceutical composition comprising a pharmaceutically acceptable diluent or carrier and (*E,E*)-2-carboxy-3-(3,4-dihydroxystyryl)acrylonitrile.

45. (New) A compound selected from:

(*E,E*)-2-(phenylethylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR8);

(*E,E*)-2-aminocarbonyl-3-[3,4-bis(t-butyldimethylsilyloxy)styryl]acrylonitrile (CR16);

(*E,E*)-2-(benzylaminocarbonyl)-3-[3,4-bis(t-butyldimethylsilyloxy)styryl]acrylonitrile (CR 18);
(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-[3,4-bis(t-butyldimethylsilyloxy)styryl]acrylonitrile (CR20);
(*E,E*)-2-(benzylaminocarbonyl)-3-(4-nitrostyryl)acrylonitrile (CR27);
(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(4-nitrostyryl)acrylonitrile (CR28); and
(*Z,E*)-2-(1-amino-2,2-dicyanoethenyl)-3-(4-nitrostyryl)acrylonitrile (CR29).

46. (New) A compound selected from:

(*E,E*)-2-(benzylaminocarbonyl)-3-styrylacrylonitrile (CR1);
(*E,E*)-2-(benzylaminocarbonyl)-3-(3,4-dimethoxystyryl)acrylonitrile (CR2);
(*E,E*)-2-(benzylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR3);
(*E,E*)-2-(phenylethylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR5);
(*E,E*)-2-(phenylpropylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR9);
(*E,E*)-2-aminothiocarbonyl-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR12);
(*E,E*)-2-aminocarbonyl-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR13);
(*E,E*)-2-carbomethoxy-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR15).

47. (New) A compound selected from:

(*E,E*)-2-(benzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4);
(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,5dimethoxy-4-hydroxystyryl)acrylonitrile (CR11);
(*E,E*)-2-aminocarbonyl-3-(3,4-dihydroxystyryl)acrylonitrile (CR17);
(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-styrylacrylonitile (CR19);
(*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR21); and
(*E,E*)-2-(β-ethanolaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR24).

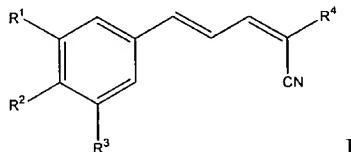
48. (New) A compound (*E,E*)-2-benzylaminocarbonyl)-3-(3,4-dihydroxystyryl)acrylonitrile (CR4).

49. (New) A compound (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-(3,5-dimethoxy-4-hydroxystyryl)acrylonitrile (CR11).

50. (New) A compound (*E,E*)-2-(3,4-dihydroxybenzylaminocarbonyl)-3-styrylacrylonitrile (CR19).

51. (New) A compound (*E,E*)-2-carboxy-3-(3,4-dihydroxystyryl)acrylonitrile.

52. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



I

wherein

R¹ and R² are each independently selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, CF₃, OCF₃ and halo;

R³ is selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, halo and CH₂-S-(CH₂)_nAr;

R⁴ is selected from the group consisting of C(X)R⁵, SO₃Ar, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), P(O)(OH)₂, P(O)(OC₁₋₆alkyl)₂, and C(NH₂)=C(CN)₂;

X is selected from O, S, NH and N-C₁₋₆alkyl;

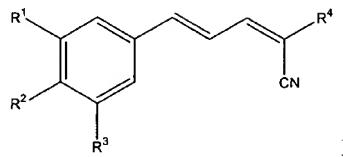
R⁵ is selected from the group consisting of NH₂, NH(CH₂)_pAr, NH(CH₂)_pOH, (CH₂)_pOC₁₋₆alkyl, C₁₋₆alkyl, C₁₋₆alkoxy, NHNH₂, NHC(O)NH₂, NHC(O)C₁₋₆alkoxy, N-morpholino and N-pyrrolidino; and

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo;

n is 0 to 4; and

p is 1-4.

53. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



I

wherein

R¹ and R² are each independently selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, CF₃, OCF₃ and halo;

R³ is selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, halo and CH₂-S-(CH₂)_nAr;

R⁴ is selected from the group consisting of C(X)R⁵, SO₃Ar, NH₂, NH-C₁₋₆alkyl and P(O)(OH)₂;

X is selected from O, S, NH and N-C₁₋₆alkyl;

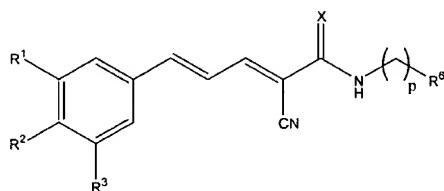
R⁵ is selected from the group consisting of NH(CH₂)_pAr, NH(CH₂)_pOH, (CH₂)_pOC₁₋₆alkyl, NHHN₂, NHC(O)NH₂, NHC(O)C₁₋₆alkoxy, N-morpholino and N-pyrrolidino; and

Ar is an aromatic group, unsubstituted with 1-4 substituents, independently selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo;

n is 0 to 4; and

p is 1-4.

54. (New) A compound of Formula II, or a salt, solvate or hydrate thereof:



II

wherein

R¹ and R² are each independently selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, CF₃, OCF₃, and halo;

R³ is selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, halo and CH₂-S-(CH₂)_nAr;

R⁶ is selected from the group consisting of Ar, OH and OC₁₋₆alkyl;

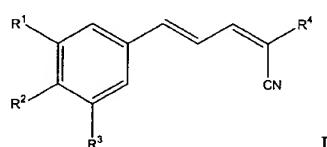
Ar is an aromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo;

X is selected from O and S;

n is 0-4; and

p is 1-4.

55. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



I

wherein

R¹ and R² are each independently selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, CF₃, OCF₃ and halo;

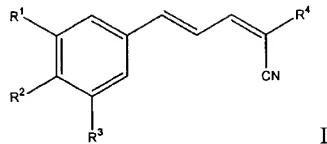
R³ is selected from the group consisting of C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), halo and CH₂-S-(CH₂)_nAr;

R⁴ is CO₂H;

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo; and

n is 0 to 4.

56. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



I

wherein

R¹ and R² are each independently selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, CF₃, OCF₃ and halo;

R³ is selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), NO₂, halo and CH₂-S-(CH₂)_nAr;

R⁴ is CO₂H;

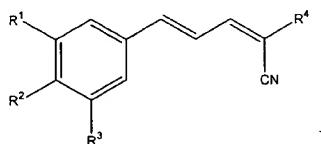
Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4 substituents, independently selected from the group consisting of OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂, CF₃, OCF₃ and halo;

n is 0 to 4; and

p is 1-4,

with the proviso that at least one of R¹ and R² is selected from the group consisting of C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), CF₃, OCF₃ and halo.

57. (New) A compound of Formula I, or a salt, solvate or hydrate thereof:



I

wherein

R^1 and R^2 are each independently selected from the group consisting of H, OH, C₁₋₆alkyl,

NH₂, NH-C₁₋₆alkyl, SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋₆alkyl), CF₃,

OCF₃ and halo;

R^3 is selected from the group consisting of H, OH, C₁₋₆alkyl, C₁₋₆alkoxy, NH₂, NH-C₁₋

alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, O-Si(C₁₋₆alkyl)(C₁₋₆alkyl)(C₁₋

alkyl), NO₂, halo and CH₂-S-(CH₂)_nAr;

R^4 is CO₂H;

Ar is an aromatic or heteroaromatic group, unsubstituted or substituted with 1-4

substituents, independently selected from the group consisting of OH, C₁₋₆alkyl,

C₁₋₆alkoxy, NH₂, NH-C₁₋₆alkyl, N(C₁₋₆alkyl)(C₁₋₆alkyl), SH, S-C₁₋₆alkyl, NO₂,

CF₃, OCF₃ and halo;

n is 0 to 4; and

p is 1-4,

with the proviso that R^1 , R^2 and R^3 are not all H.

58. (New) The compound (*E,E*)-2-carboxy-3-(3,5-dimethoxy-4-

hydroxystyryl)acrylonitrile (CR-14).